WHAT IS CLAIMED IS:

1. A light emitting device comprising at least a pixel including therein:

a light emitting element;

means for storing digital video signals; and

means for determining periods in which the light emitting element emits a light in accordance with image information of the stored digital video signals.

2. A light emitting device comprising at least a pixel including therein:

a light emitting element;

means for storing digital video signals; and

means for determining periods in which the light emitting element emits a light in accordance with image information of the stored digital video signals.

wherein the periods turn up successively in one frame period.

3. A light emitting device comprising:

a plurality of pixels each including therein:

a light emitting element;

at least a thin film transistor for controlling a current provided to the light emitting element;

n first memories;

wherein each bit of n bit digital video signals is sequentially written in each of the n first memories;

n second memories;

wherein each bit of n bit digital video signals, which have been written in each of the n first memories, is stored in each of the n second memories;

a counter circuit for outputting n counter signals having different frequencies;

a display signal generating portion to turn on the thin film transistor during a period that starts with the start of output of the n counter signals stored in the n second memories and ends as first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches second information of each of the n counter signals.

4. A light emitting device comprising:

a plurality of pixels each including therein:

a light emitting element;

at least a thin film transistor for controlling a current provided to the light emitting element;

n first memories;

wherein each bit of n bit digital video signals is sequentially written in each of the n first memories;

n second memories;

wherein each bit of n bit digital video signals, which have been written in each of the n first memories, is stored in each of the n second memories;

a counter circuit for outputting n counter signals having different frequencies;

a display signal generating portion to turn on the thin film transistor during a period which is determined by information of each bit of the n bit digital video signals inputted to the display signal generating portion and information of each of the n counter signals.

5. An electronic apparatus in combination with the light emitting device of claim 1.

6. A device according to claim 5,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type display, a video camera, and a cellular phone.

7. A method of driving a light emitting device,

said light emitting device including a plurality of pixels each comprising therein:

n first memories;

n second memories;

a display signal generating portion;

a counter circuit;

a light emitting element;

said method comprising the steps of:

sequentially writing each bit of n bit digital video signals in each of the n first memories;

writing each bit of n bit digital video signals, which have been written in each of the n first memories, in each of the n second memories at once;

inputting each bit of the n bit digital video signals, which have been written in each of the n second memories, to the display signal generating portion;

starting output of n counter signals having different frequencies

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from the counter circuit in response to a reset signal;

inputting the n counter signals to the display signal generating portion,

wherein the light emitting element emits a light only during a period that starts with the start of output of the n counter signals and ends as first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches second information each of the n counter signals.

8. A method of driving a light emitting device,

said light emitting device including a plurality of pixels each comprising therein:

n first memories;

n second memories;

n first switching thin film transistors;

n second switching thin film transistors;

a display signal generating portion;

a counter circuit; and

a light emitting element,

said method comprising the steps of:

sequentially turning on the n first switching thin film transistors to write each bit of the n bit digital video signals in each of the n first memories;

turning on the n second switching thin film transistors at once to write each bit of n bit digital video signals, which have been written in each of the n first memories, in each of the n second memories at once;

inputting each bit of the n bit digital video signals, which have been written in each of the n second memories, to the display signal generating portion;

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starting output of n counter signals having different frequencies from the counter circuit in response to a reset signal;

inputting the n counter signals to the display signal generating portion,

wherein the light emitting element emits a light only during a period that starts with the start of output of the n counter signals and ends as first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches second information each of the n counter signals.

9. A method of driving a light emitting device,

said light emitting device including a plurality of pixels each comprising therein:

n first memories;

n second memories;

n first switching thin film transistors;

n second switching thin film transistors;

a display signal generating portion;

a counter circuit;

a current controlling thin film transistor; and

a light emitting element,

said method comprising the steps of:

sequentially turning on the n first switching thin film transistors to write each bit of the n bit digital video signals in each of the n first memories;

turning on the n second switching thin film transistors at once to write each bit of n bit digital video signals, which have been written in each of the n first memories, in each of the n second memories at once;

inputting each bit of the n bit digital video signals, which have been

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written in each of the n second memories, to the display signal generating portion;

starting output of n counter signals having different frequencies from the counter circuit in response to a reset signal;

inputting the n counter signals to the display signal generating portion,

wherein the current controlling thin film transistor is turned on by a display signal outputted from the display signal generation portion only during a period that starts with the start of output of the n counter signals and ends as first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches second information of each of the n counter signals,

wherein the light emitting element emits a light when the current controlling thin film transistor is turned on.

10. A method according to claim 9,

wherein the current controlling thin film transistor is an n-channel thin film transistor.

11. A method of driving a light emitting device,

said light emitting device including a plurality of pixels each comprising therein:

n first memories;

n second memories;

a display signal generating portion;

a counter circuit;

a light emitting element;

said method comprising the steps of:

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sequentially writing each bit of n bit digital video signals in each of the n first memories;

writing each bit of n bit digital video signals, which have been written in each of the n first memories, in each of the n second memories at once;

inputting each bit of the n bit digital video signals, which have been written in each of the n second memories, to the display signal generating portion;

starting output of n counter signals having different frequencies from the counter circuit in response to a reset signal;

inputting the n counter signals to the display signal generating portion,

wherein the display signal generating portion has,

a first function of comparing first information of each bit of the n bit digital video signals inputted to the display signal generating portion with second information of each of the n counter signals inputted to the display signal generating portion to judge whether or not the first and second information match; and

a second function of making the light emitting element emit a light only during a period that starts with the start of output of the n counter signals and ends as the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals.

12. A method of driving a light emitting device,

said light emitting device including a plurality of pixels each comprising therein:

n first memories;

n second memories;

n first switching thin film transistors;

n second switching thin film transistors;

a display signal generating portion;

a counter circuit; and

a light emitting element,

said method comprising the steps of:

sequentially turning on the n first switching thin film transistors to write each bit of the n bit digital video signals in each of the n first memories;

turning on the n second switching thin film transistors at once to write each bit of n bit digital video signals, which have been written in each of the n first memories, in each of the n second memories at once;

inputting each bit of the n bit digital video signals, which have been written in each of the n second memories, to the display signal generating portion;

starting output of n counter signals having different frequencies from the counter circuit in response to a reset signal;

inputting the n counter signals to the display signal generating portion,

wherein the display signal generating portion has,

a first function of comparing first information of each bit of the n bit digital video signals inputted to the display signal generating portion with second information of each of the n counter signals inputted to the display signal generating portion to judge whether or not the first and second information match; and

a second function of making the light emitting element emit a light only during a period that starts with the start of output of the n counter signals and ends as the first information of each bit of the n bit digital video signals inputted to

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the display signal generating portion matches the second information of each of the n counter signals.

13. A method of driving a light emitting device,

said light emitting device including a plurality of pixels each comprising therein:

n first memories;

n second memories;

n first switching thin film transistors;

n second switching thin film transistors;

a display signal generating portion;

a counter circuit;

a current controlling thin film transistor; and

a light emitting element,

said method comprising the steps of:

sequentially turning on the n first switching thin film transistors to write each bit of the n bit digital video signals in each of the n first memories;

turning on the n second switching thin film transistors at once to write each bit of n bit digital video signals, which have been written in each of the n first memories, in each of the n second memories at once;

inputting each bit of the n bit digital video signals, which have been written in each of the n second memories, to the display signal generating portion;

starting output of n counter signals having different frequencies from the counter circuit in response to a reset signal;

inputting the n counter signals to the display signal generating portion,

wherein the display signal generating portion has,

a first function of comparing first information of each bit of the n bit digital video signals inputted to the display signal generating portion with second information of each of the n counter signals inputted to the display signal generating portion to judge whether or not the first and second information match; and

a second function of turning on the current controlling thin film transistor only during a period that starts with the start of output of the n counter signals and ends as the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals,

wherein the light emitting element emits a light when the current controlling thin film transistor is turned on.

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14. A method according to claim 13,

wherein the current controlling thin film transistor is an n-channel thin film transistor.

15. A method according to claim 7,

wherein the display signal generating portion has a NOR and n exclusive ORs,

wherein each of the n exclusive ORs has two input terminals,

wherein one of the input terminals is inputted with each bit of the n bit digital video signals inputted to the display signal generating portion while the other is inputted with the n counter signals,

wherein each of the output terminals of the n exclusive ORs is all connected to an input terminal of the NOR,

wherein third information of signals outputted from an output terminal

of the NOR is used to judge whether or not the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each the n counter signals inputted to the display signal generating portion.

16. A method according to claim 7,

wherein the display signal generating portion has an R-S flip-flop circuit;

wherein the R-S flip-flop circuit has two input terminals

wherein one of the input terminals is inputted with reset signals while the other is inputted with signals having third information whether or not the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals inputted to the display signal generating portion,

wherein signals outputted from an output terminal of the R-S flip-flop circuit causes the light emitting element to emit a light only during a period that starts with the start of output of the n counter signals and ends as the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals.

17. A method according to claim 7,

wherein each of the first memories and second memories is an SRAM.

18. A method according to claim 7,

wherein clock signals are inputted to the counter circuit, and

wherein the frequencies of the n counter signals arranged in order from

the highest to the lowest correspond to 1/2, $1/2^2$, ···, $1/2^n$ of the frequencies of the clock signals, respectively.

19. A liquid crystal display device comprising at least a pixel including therein:

a liquid crystal cell;

means for storing digital video signals; and

means for determining periods in which the liquid crystal cell is turned on in accordance with image information of the stored digital video signals.

20. A liquid crystal display device comprising at least a pixel including therein:

a liquid crystal cell;

means for storing digital video signals; and

means for determining periods in which the liquid crystal cell is turned on in accordance with image information of the stored digital video signals,

wherein the periods turn up successively in one frame period.

21. A liquid crystal display device comprising:

a plurality of pixels each including therein:

a liquid crystal cell;

n first memories;

n second memories;

wherein each bit of n bit digital video signals, which have been written in each of the n first memories, is stored in each of the n second memories;

means for determining periods in which the liquid crystal cell is

turned on in accordance with image information of the stored digital video signals.

22. A liquid crystal display device comprising:

a plurality of pixels each including therein:

a liquid crystal cell;

n memories;

means for determining periods in which the liquid crystal cell is turned on in accordance with image information of n bit digital video signals each written in each of the n memories.

23. An electronic apparatus in combination with the liquid crystal display device of claim 19.

24. A device according to claim 23,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type display, a video camera, and a cellular phone.

25. An electronic apparatus in combination with the liquid crystal display device of claim 20.

26. A device according to claim 25,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type

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display, a video camera, and a cellular phone.

27. An electronic apparatus in combination with the liquid crystal display device of claim 21.

28. A device according to claim 27,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type display, a video camera, and a cellular phone.

29. An electronic apparatus in combination with the liquid crystal display device of claim 22.

30. A device according to claim 29,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type display, a video camera, and a cellular phone.

31. An electronic apparatus in combination with the light emitting device of claim 2.

32. A device according to claim 31,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type

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display, a video camera, and a cellular phone.

33. An electronic apparatus in combination with the light emitting device of claim 3.

34. A device according to claim 33,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type display, a video camera, and a cellular phone.

35. An electronic apparatus in combination with the light emitting device of claim 4.

36. A device according to claim 35,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type display, a video camera, and a cellular phone.

37. A method according to 7,

wherein the light emitting device is in combination with an electronic apparatus,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type display, a video camera, and a cellular phone.

38. A method according to claim 8,

wherein the display signal generating portion has a NOR and n exclusive ORs,

wherein each of the n exclusive ORs has two input terminals,

wherein one of the input terminals is inputted with each bit of the n bit digital video signals inputted to the display signal generating portion while the other is inputted with the n counter signals,

wherein each of the output terminals of the n exclusive ORs is all connected to an input terminal of the NOR,

wherein third information of signals outputted from an output terminal of the NOR is used to judge whether or not the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each the n counter signals inputted to the display signal generating portion.

39. A method according to claim 8,

wherein the display signal generating portion has an R-S flip-flop circuit;

wherein the R-S flip-flop circuit has two input terminals

wherein one of the input terminals is inputted with reset signals while the other is inputted with signals having third information whether or not the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals inputted to the display signal generating portion,

wherein signals outputted from an output terminal of the R-S flip-flop circuit causes the light emitting element to emit a light only during a period that starts with the start of output of the n counter signals and ends as the first

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information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals.

40. A method according to claim 8,

wherein each of the first memories and second memories is an SRAM.

41. A method according to claim 8,

wherein clock signals are inputted to the counter circuit, and

wherein the frequencies of the n counter signals arranged in order from the highest to the lowest correspond to $1/2$, $1/2^2$, $\cdots$, $1/2^n$ of the frequencies of the clock signals, respectively.

42. A method according to 8,

wherein the light emitting device is in combination with an electronic apparatus,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type display, a video camera, and a cellular phone.

43. A method according to claim 9,

wherein the display signal generating portion has a NOR and n exclusive ORs,

wherein each of the n exclusive ORs has two input terminals,

wherein one of the input terminals is inputted with each bit of the n bit digital video signals inputted to the display signal generating portion while the other

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is inputted with the n counter signals,

wherein each of the output terminals of the n exclusive ORs is all connected to an input terminal of the NOR,

wherein third information of signals outputted from an output terminal of the NOR is used to judge whether or not the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each the n counter signals inputted to the display signal generating portion.

44. A method according to claim 9,

wherein the display signal generating portion has an R-S flip-flop circuit;

wherein the R-S flip-flop circuit has two input terminals

wherein one of the input terminals is inputted with reset signals while the other is inputted with signals having third information whether or not the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals inputted to the display signal generating portion,

wherein signals outputted from an output terminal of the R-S flip-flop circuit causes the light emitting element to emit a light only during a period that starts with the start of output of the n counter signals and ends as the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals.

45. A method according to claim 9,

wherein each of the first memories and second memories is an SRAM.

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46. A method according to claim 9,

wherein clock signals are inputted to the counter circuit, and

wherein the frequencies of the n counter signals arranged in order from the highest to the lowest correspond to 1/2, $1/2^2$, ···, $1/2^n$ of the frequencies of the clock signals, respectively.

47. A method according to 9,

wherein the light emitting device is in combination with an electronic apparatus,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type display, a video camera, and a cellular phone.

48. A method according to claim 11,

wherein the display signal generating portion has a NOR and n exclusive ORs,

wherein each of the n exclusive ORs has two input terminals,

wherein one of the input terminals is inputted with each bit of the n bit digital video signals inputted to the display signal generating portion while the other is inputted with the n counter signals,

wherein each of the output terminals of the n exclusive ORs is all connected to an input terminal of the NOR,

wherein third information of signals outputted from an output terminal of the NOR is used to judge whether or not the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each the n counter signals inputted to the display signal

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generating portion.

49. A method according to claim 11,

wherein the display signal generating portion has an R-S flip-flop circuit;

wherein the R-S flip-flop circuit has two input terminals

wherein one of the input terminals is inputted with reset signals while the other is inputted with signals having third information whether or not the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals inputted to the display signal generating portion,

wherein signals outputted from an output terminal of the R-S flip-flop circuit causes the light emitting element to emit a light only during a period that starts with the start of output of the n counter signals and ends as the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals.

50. A method according to claim 11,

wherein each of the first memories and second memories is an SRAM.

51. A method according to claim 11,

wherein clock signals are inputted to the counter circuit, and

wherein the frequencies of the n counter signals arranged in order from the highest to the lowest correspond to 1/2, $1/2^2$, ···, $1/2^n$ of the frequencies of the clock signals, respectively.

52. A method according to 11,

wherein the light emitting device is in combination with an electronic apparatus,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type display, a video camera, and a cellular phone.

53. A method according to claim 12,

wherein the display signal generating portion has a NOR and n exclusive ORs,

wherein each of the n exclusive ORs has two input terminals,

wherein one of the input terminals is inputted with each bit of the n bit digital video signals inputted to the display signal generating portion while the other is inputted with the n counter signals,

wherein each of the output terminals of the n exclusive ORs is all connected to an input terminal of the NOR,

wherein third information of signals outputted from an output terminal of the NOR is used to judge whether or not the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each the n counter signals inputted to the display signal generating portion.

54. A method according to claim 12,

wherein the display signal generating portion has an R-S flip-flop circuit;

wherein the R-S flip-flop circuit has two input terminals

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wherein one of the input terminals is inputted with reset signals while the other is inputted with signals having third information whether or not the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals inputted to the display signal generating portion,

wherein signals outputted from an output terminal of the R-S flip-flop circuit causes the light emitting element to emit a light only during a period that starts with the start of output of the n counter signals and ends as the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals.

55. A method according to claim 12,

wherein each of the first memories and second memories is an SRAM.

56. A method according to claim 12,

wherein clock signals are inputted to the counter circuit, and

wherein the frequencies of the n counter signals arranged in order from the highest to the lowest correspond to 1/2, $1/2^2$, ···, $1/2^n$ of the frequencies of the clock signals, respectively.

57. A method according to 12,

wherein the light emitting device is in combination with an electronic apparatus,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type

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display, a video camera, and a cellular phone.

58. A method according to claim 13,

wherein the display signal generating portion has a NOR and n exclusive ORs,

wherein each of the n exclusive ORs has two input terminals,

wherein one of the input terminals is inputted with each bit of the n bit digital video signals inputted to the display signal generating portion while the other is inputted with the n counter signals,

wherein each of the output terminals of the n exclusive ORs is all connected to an input terminal of the NOR,

wherein third information of signals outputted from an output terminal of the NOR is used to judge whether or not the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each the n counter signals inputted to the display signal generating portion.

59. A method according to claim 13,

wherein the display signal generating portion has an R-S flip-flop circuit;

wherein the R-S flip-flop circuit has two input terminals

wherein one of the input terminals is inputted with reset signals while the other is inputted with signals having third information whether or not the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals inputted to the display signal generating portion,

wherein signals outputted from an output terminal of the R-S flip-flop

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circuit causes the light emitting element to emit a light only during a period that starts with the start of output of the n counter signals and ends as the first information of each bit of the n bit digital video signals inputted to the display signal generating portion matches the second information of each of the n counter signals.

60. A method according to claim 13,

wherein each of the first memories and second memories is an SRAM.

61. A method according to claim 13,

wherein clock signals are inputted to the counter circuit, and

wherein the frequencies of the n counter signals arranged in order from the highest to the lowest correspond to 1/2, $1/2^2$, ···, $1/2^n$ of the frequencies of the clock signals, respectively.

62. A method according to 13,

wherein the light emitting device is in combination with an electronic apparatus,

wherein the electronic apparatus is one selected from the group consisting of an electroluminescence display device, a digital still camera, a notebook computer, a mobile computer, an image reproducing device, a goggle type display, a video camera, and a cellular phone.

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